

U.S. Military Academy - Ordnance Compound Workshop/Storehouse  
(Crozier Hall, Cadet Activities Club) HABS No. NY-5708-10  
East of the intersection of Ruger and Howard  
Roads, east of Building No. 637  
U.S. Military Academy  
West Point  
Orange County  
New York

HABS  
NY  
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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey  
National Park Service  
Department of the Interior  
Washington, DC 20013-7127

HISTORIC AMERICAN BUILDINGS SURVEY

U.S. MILITARY ACADEMY - ORDNANCE COMPOUND WORKSHOP/STOREHOUSE  
(CROZIER HALL, CADET ACTIVITIES CLUB)

LOCATION: East of the intersection of Ruger and Howard Roads, east of Building No. 637 (HABS No. NY-5708-9), U.S. Military Academy, West Point, Orange County, New York.

USGS, West Point Quadrangle, Universal Transverse Mercator  
Coordinates: 18.587060.4582910.

PRESENT OWNER  
AND OCCUPANT: U.S. Military Academy, Department of the Army

PRESENT USE: Cadet Activities Club.

SIGNIFICANCE: The Ordnance Compound is the earliest Gothic Revival design at West Point and is considered to be one of three buildings from the 1830s-40s which became stylistic prototypes for subsequent designs, most notably those by Cram, Goodhue and Ferguson.

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: ca. 1840. A discrepancy exists over the date of erection, between 1838 and 1840. Williams's Facilities Report and drawings at the National Archives give the date as 1840. Robert Lange in "An Overview" states that the Compound was completed in 1840.
2. Architect: Tradition holds that Major Richard Delafield, Superintendent of the Academy in 1838, designed the Ordnance Compound. There is little evidence to substantiate or deny this attribution although Lange states that construction on the Compound might have been started before Delafield arrived at the Academy. Drawings at the U.S. Military Academy, which are dated 1838-39, give credit to Delafield. Perhaps the strongest evidence in Delafield's favor is the similarity in style and construction to the Library (now demolished) and the Cadet Barracks (Central Barracks HABS No. NY-5708-8), which he designed in 1841 and 1851 respectively. See Lange's "Overview" for a discussion of the Library and the Cadet Barracks.
3. Original and subsequent owners: U.S. Military Academy, Department of the Army.
4. Builder: Unknown.
5. Original plans and construction: The exterior of the Workshop/Storehouse appears to have been little changed since its construction. The first

floor is believed to have been used for the production of ammunition and the second floor for storage (Grashof). The interior has been altered a number of times. It is not known what the original interior looked like but drawings at the U.S. Military Academy Facilities Engineer's Office indicate that prior to alterations in 1942 the first floor plan consisted of three rooms and the second floor two rooms.

Boynton's History of West Point states that "The Ordnance and Artillery Laboratory on the north side of the Plain, was erected in 1840, and consists of three two-story stone buildings, used for fabrication of ammunition, repairing, etc., all within a stone-enclosed yard, containing, besides shelter for Field Batteries."

The Annual Report of 1909 states that "The north storehouse at the laboratory is in such a dilapidated condition that it must be largely rebuilt. An estimate of \$7,150 for this purpose and for necessary repairs to roads and walks of the laboratory was submitted to the last Congress, but only \$3,150 for this purpose was appropriated. An estimate for the balance of the funds has been submitted again this year."

6. Alterations and additions: The exterior has suffered few alterations. On the facade or west elevation, alterations have been confined almost exclusively to three masonry openings which were used interchangeably for doors or windows. The present first floor double doors were altered into two double-hung sash windows in 1942 and then back to doors in 1966 according to drawings entitled "Alterations to Ordnance Storehouse." The second floor opening above these doors, which was probably a window originally, was a door in 1942 but was altered into a double-hung window at that time with a new concrete sill and stone fill. The extreme right bay on the first floor of this elevation was converted from a window into a door in 1942, converted back to a window in 1966 and after that date was made into a door again. Drawings at the National Archives indicate that this opening was originally a door.

An alteration which has affected all elevations was the replacement of original double quarrel light casements with double-hung wood sash between 1871 and 1879. This was determined from historic photographs in the U.S. Military Academy Archives and Special Collections.

Besides the removal of wrought iron grilles from the first floor windows of the east, north and south elevations, the only other exterior alterations have occurred on the south elevation, where a vent was placed in the wall, and the north elevation, where the left window bay of the first floor was a door for an undetermined amount of time prior to 1942.

Numerous interior changes have completely altered both the original fabric and the configuration of room spaces. Drawings indicate a partial history of these changes, which include the conversion from a storehouse (?) to a barracks in 1942; the conversion into two N.C.O. quarters in 1947; the rehabilitation of those quarters in 1952 and 1958; and the conversion to Crozier Hall and a recreation use in 1966. This last change included new partitions, wood panelling, new window sash, new doors and a new location (2nd interior location) for the

stairway. The wood floors and joists were replaced at an unknown date with concrete slab.

B. Historical Context:

"The Board of Visitors' Report of 1826 recommended that a gun house be erected to protect artillery pieces from exposure to the weather. Subsequently, the Board of Visitors' Report for 1833 stated that a gun house, a laboratory, and a magazine should provide shelter for Ordnance equipment and Ordnance stores. This resulted in the building of the present compound wall and the three original buildings comprising the Ordnance and Artillery Laboratory in 1837. Unfortunately, records are not available that indicate the cost of these buildings; but it is believed that the Act of Congress for the support of the Military Academy approved 2 March 1837 for appropriation of \$8,000.00 was expended for the construction of this laboratory.

"The Guide Book to West Point in July of 1844 states, 'The plan and arrangement of this structure is such as to excite our curiosity. The Towers are designed for the storage of various kinds of Ordnance.' During the early years of the compound, the compound yard with its Revolutionary trophies was the predecessor to the Ordnance Museum founded in 1854 and today known as the West Point Museum.

"Later the Ordnance and Artillery Laboratory was known as the Ordnance Compound. This took place after the subject of Ordnance was transferred from the Instructor of Artillery to the Instructor of Ordnance and Gunnery on 27 February 1857. Ordnance as a subject, was taught in the Compound from 1837 to 1913 when the Department of Ordnance and Science of Gunnery moved to the newly built East Academic Building. The Ordnance Detachment lived in the barracks within the Compound from 1837 to 1947, when the detachment moved to another location. Upon the movement of the Ordnance troops from the Compound, the flank buildings were converted into apartments for enlisted men and the main building and the little building were used as a photographic laboratory." ("Historical Background on the First Class Compound," Dedication of Benet Hall leaflet, 11 October 1964, U.S. Military Academy Archives.)

The Department of Ordnance and Gunnery was an essential part of a cadet's training in the mid-nineteenth to early-twentieth century. The history of both the department and its courses was described in the Annual Report of 1897, which is reproduced and found in the Supplemental Material section of HABS No. NY-5708-9.

A description of the Ordnance Lab from the 1902 Annual Report outlines its functions at that time. "The routine work at the laboratory by the ordnance detachment includes the care and preservation of all the service and obsolete ordnance, trophy guns, etc., at the post, the preparation of ammunition and blank cartridges for cadet practice and drill, the manufacture of fireworks, and such repairs and other work connected with guns, carriages, small arms, ammunition, and ordnance supplies generally as may be necessary in the practical instruction of cadets in their various duties." In the twentieth century the ordnance department lost much of its early significance and its original buildings were gradually converted for other uses. In 1961 the Ordnance Compound buildings were dedicated as the First Class Club in honor of three former instructors: Brigadier General Stephen Vincent Benet,

USMA 1849, Major General William Crozier, USMA 1876, and Colonel James G. Benton, USMA 1842 (see Supplemental Material).

For the historical context of the Ordnance Compound within the overall development of the Academy see HABS No. NY-5708, Volume 2, "West Point: An Overview of the History and Physical Development of the United States Military Academy."

## PART II. ARCHITECTURAL INFORMATION

### A. General Statement:

1. Architectural character: The Ordnance Compound Workshop/Storehouse is a simple, utilitarian example of American Gothic Revival in the Tudor Style. Its materials and details associate it with two contemporary buildings at the Academy in addition to the other buildings of the Ordnance Compound.
2. Condition of fabric: The building is in good condition with only minor patch work on the original exterior walls.

### B. Description of Exterior:

1. Overall dimensions: The Workshop/Storehouse, like its counterpart on the opposite side of the Compound, is a two story rectangular building with a projecting three side elevation on the north. The facade faces west into the courtyard. The east and west elevations, with four bays each, are 50' long while the two bay south elevation and three bay north elevation are 24' long.
2. Foundations: Foundation walls cannot be seen above grade but it can be assumed that they are the same granite as the principal walls.
3. Walls: The 2' thick walls are rock-faced granite laid in a random range ashlar pattern with a raised joint. This same brown and gray granite was used for the other contemporary parts of the Compound and for the Cadet Barracks. The old Library is said to have had the same granite as well. Granite is used for the walls and lintels while a reddish-brown sandstone (?) is used for the label molds, window sills and the projecting cornice.
4. Structural system, framing: Structural systems consist of load-bearing stone walls, concrete slab floors and a wooden rafter roof.
5. Chimneys: Two brick chimney stacks are situated on the roof near the north wall. The eastern one has an octagonal terra cotta chimney pot.
6. Openings:
  - a. Doorways and doors: The building's only two entrances are located on the facade. The principal double doors date from 1966 and are partially glazed with twelve lights each; a transom space above is now filled with wood. This doorway has a large sandstone lintel

turned down at the ends to resemble the window label molds. A later concrete sill and stoop were added at an unknown date.

The far right bay was an original doorway according to drawings at the National Archives. Drawings in the possession of the Facilities Engineer's Office indicate that this opening was converted to a window in 1966 and then reverted back to a doorway after that date with a new door. The label mold and lintel over this doorway are identical to those of the windows. The transom above the six-panel door is now blocked with wood.

- b. Windows: All of the windows are 6-over-6 double-hung sash. There are six windows on the facade, six on the north, eight on the east and four on the south. "Obscure" glass is found in all of the windows on the south, two windows on the east and one window on the west. With the exception of two windows which had been altered as doors and have concrete sills, all have sandstone sills.

7. Roof:

- a. Shape, covering: The hip roof is covered with slate and has two scuttles each (additions) on its east and west slopes.
- b. Cornice: The coved sandstone cornice is similar to those used on the other contemporary buildings of the Compound. Between the cornice and the roof a wooden fascia, divided vertically with wooden blocks, acts like a frieze, albeit one above the cornice. Above this fascia a metal gutter runs along the edge of the roof to downspouts at the corners.

C. Description of Interior:

- 1. Floor plans: The first floor of the Workshop/Storehouse is now divided into four major areas: foyer, lounge, women's room and matron's room. The second floor has a large women's room, a lounge and five unidentified smaller rooms. See the accompanying sketch plan for the room arrangement. All of the interior has been thoroughly altered from its original appearance; no original fabric is exposed.
- 2. Stairways: The quarter-turn staircase with its intermediate landing is a later stair in a relocated position. Its location prior to 1942 was the southwest corner of the first floor, where the present women's room is located. The wooden staircase has an ornate cast iron balustrade, most likely from a demolished Academy building, around its opening on the second floor.
- 3. Flooring: The floors are concrete slabs covered with carpeting for the most part.
- 4. Wall and ceiling finish: Walls are covered with either dry wall and plaster or wood panelling. Dropped ceilings are used throughout the building; the first floor lounge room also has false ceiling beams.

5. Openings: All doors and windows are replacements and are not notable in any respect.
6. Decorative features and trim: Although it is not original to the building, there is a nineteenth-century cast iron balustrade around the staircase opening on the second floor.
7. Hardware: Window sills and jambs on the first floor show evidence of wrought iron grilles, similar to those on the Barracks, which covered each window on the exterior.
8. Mechanical equipment:
  - a. Heating, air-conditioning, ventilation: Four scuppers, two on each side of the hip ridge, have been added to the roof for ventilation. Also added were two exhaust vents on the east and south elevations which correspond to the 1957 kitchen locations on the first and second floors respectively.
  - b. Lighting: No original lighting fixtures remain. Two electric lamps have been added to the facade flanking the principal entrance.
  - c. Plumbing: There are no systems of interest.

D. Site:

1. General setting and orientation: The Ordnance Compound is on a hill and faces north, downhill, toward the Hudson River. The Workshop/Storehouse is situated on the north east corner of the Compound and faces west toward its contemporary and similar counterpart (HABS No. NY-5708-11) and the Barracks (HABS No. 5708-9). To the southwest is the Blacksmith/Carpenter Shop (HABS No. NY-5708-14) in the center of the Compound courtyard. See sketch of Ordnance Compound for this relationship. The Compound's perimeter stone wall adjoins the building on its south and west sides; the building actually sits outside of the Compound, forming part of its enclosure. Howard Road passes just north of the Workshop/Storehouse. Across the road to the north is the Ticket Office (U.S.M.A. No. 639) by Paul P. Cret (originally the Applied Instruction Building, 1937). East of the building is a public restroom (U.S.M.A. No. 631), beyond which the ground rises to an intermediate plateau containing the amphitheater and then rises further to the Plain where the January 1943 Monument, the principal U.S.M.A. flag pole and the Battle Monument are located. This area to the east was also known as famed Execution Hollow, which according to historical accounts, was an execution site during the Revolutionary War. It was filled-in early in the twentieth century. The Ordnance Compound is on the northwest edge of the Academic Area identified in the "Historical Overview" by Lange.

PART III. SOURCES OF INFORMATION

- A. Architectural Drawings: Original drawings are in the U.S. Military Academy Special Collections and at the National Archives in Washington, D.C. (Record

Group 77, Drawer 32, Sheets 18 and 19, Records of the Office of the Chief Engineer, Cartographic and Architectural Branch). Subsequent alteration drawings are in the Facilities Engineer's Office, Directorate of Engineering and Housing, U.S. Military Academy.

B. Early Views: Early photographs can be found in the U.S. Military Academy Archives and Special Collections. Some of these are reproduced in the Grashof and Lange volumes of this project.

C. Bibliography:

1. Primary and unpublished sources: Records, U.S. Military Academy Archives and Special Collections. See bibliographic essay in the Lange volume of this project for a listing of record groups.

2. Secondary and published sources:

Annual Reports, U.S. Military Academy.

Boynton, Edward C. History of West Point And Its Military Importance During the American Revolution And the Origin And Progress of the United States Military Academy. New York: Van Nostrand, 1863.

Grashof, Bethanie C. "Building Analysis and Preservation Guidelines for Category I and Selected Category II Buildings at the United States Military Academy, West Point, New York," Historic American Buildings Survey, 1983. HABS No. NY-5708.

"Historical Background on the First Class Compound," Dedication of Benet Hall leaflet, 11 October 1964. U.S. Military Academy Archives.

Lange, Robie S. "West Point: An Overview of the History and Physical Development of the United States Military Academy," Historic American Buildings Survey, 1983. HABS No. NY-5708.

"West Point Dedicates Three Buildings For Former Instructors," Assembly, Summer 1961, 20, p. 47.

D. Likely Sources Not Yet Investigated: National Archives, Washington, D.C.

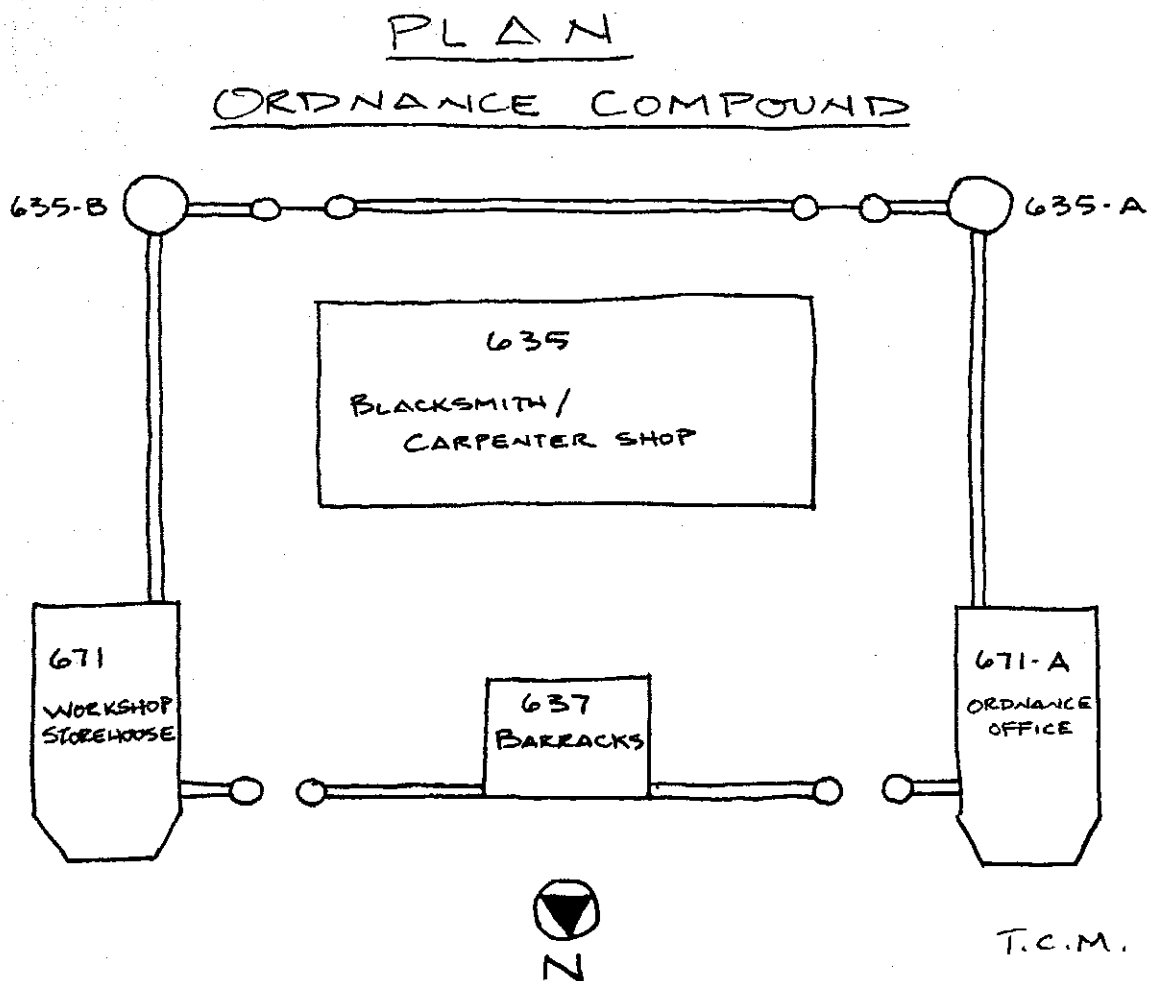
E. Supplemental Material:

1. Sketch plan of Ordnance Compound.

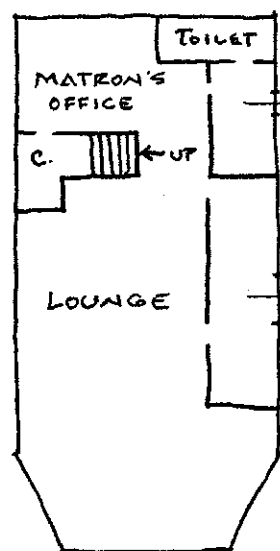
2. Assembly article, 1961.



1. Sketch Plan of Ordnance Compound



(NOT TO SCALE)

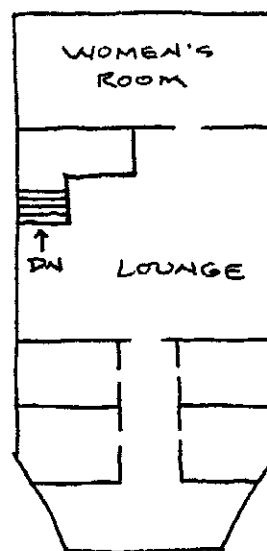


FIRST FLOOR

PLAN  
WORKSHOP/  
STOREHOUSE

U.S.M.A.  
671  
H.A.B.S.  
NY-5708-10

T.C.M. 1984



SECOND FLOOR

2. "West Point Dedicates Three  
Buildings For Former Instructors,"  
Assembly, Summer 1961, 20, p. 47.

The buildings, previously unnamed, are part of what is known as the Ordnance Compound, which for 90 years was used for instruction and housing by the Academy's Department of Ordnance. The compound lies west of Trophy Point where the hill begins its descent to the Hudson River.

During their first 20 years, the buildings housed the then Department of Artillery. When the Department of Ordnance was founded in 1857, they were used for instruction buildings by that department. Then, from 1913-1947 they served as living quarters for members of the Ordnance Detachment. In 1947, they became apartments for non-commissioned officers.

Attending the dedication ceremonies were Lieutenant General John H. Hinrichs, the present Army Chief of Ordnance; Brigadier General (ret.) Earl MacFarland, former Professor and Head of the Ordnance Department here, and later Assistant Chief of Army Ordnance; Mrs. James J. Walsh, the widow of the Ordnance Association's founder; and Brigadier General (ret.) Chauncey L. Fenton, honorary chairman of the Board of Trustees of the Association of Graduates.

Three buildings constructed in 1837, as a group the second oldest still standing at West Point, were dedicated 25 May in honor of three Military Academy graduates who had been instructors at the Academy during the 19th century.

The buildings were named Benton, Benet and Crozier Halls, for the following men:

-Captain James G. Benton, Class of 1842, the first instructor and head of the then Department of Ordnance and Science of Gunnery at the Academy.

-Major General Stephen V. Benet, class of 1847, the second head of the department. He later served 17 years as Army Chief of Ordnance. Gen. Benet was the uncle of the poet who bore the same name.

-Major General William Crozier, class of 1876, who was a mathematics instructor at West Point and later became Army Chief of Ordnance, also holding the position for 17 years.

The old halls have been converted into an Activity Center for First Classmen and their guests.

Situated close to scenic Trophy Point, the nineteenth century structures provide a physical link with heritage and the West Point past.

PART IV. PROJECT INFORMATION

This documentation is part of a multi-year project sponsored by the National Park Service and the United States Military Academy, explained in the United States Military Academy, HABS No. NY-5708, Volume 1, "Methodology." This written documentation was prepared by Travis C. McDonald, Jr., architectural historian, in 1982-1985 based on fieldwork conducted in 1982.